

PROCEEDINGS
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SIX NEW SPECIES OF PLANTS FROM MEXICO.¹

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During the preparation of an account of the woody plants of Mexico, the first portion of which is now being printed in the Contributions from the National Herbarium, a few plants have been found which can not be referred to any of the published species. Six of these are here described as new. Four of them (*Podopterus*, *Ruprechtia*, *Coccoloba*) belong to the family Polygonaceae, one to the Aristolochiaceae, and one (*Fendlerella*) to the Hydrangeaceae.

Aristolochia malacophylla Standl., sp. nov.

Stems subterete, densely pilose with retrorse, sericeous, whitish or fulvous hairs, the internodes 6.5-10.5 cm. long; petioles very stout, 1 cm. long or shorter, densely pilose; leaf blades oval or elliptic-oval, about 12.5 cm. long and 7-8 cm. wide, cordate at the base, obtuse or rounded at the apex, subcoriaceous, densely pilose on the upper surface with slender soft appressed hairs; the venation prominulous, beneath loosely sordid-tomentose, the lateral veins 7 on each side, arcuate; inflorescence axillary, racemose, few-flowered, the flowers nearly sessile; ovary densely sericeous; calyx short-pilose outside, the tube inflated, 1 cm. long, the limb inflated at the base into a sac 2 cm. long and 1 cm. thick, the lip about 5 cm. long, glabrous within, cleft into 3 linear lobes.

Type in the U. S. National Herbarium, No. 462360, collected at Salto de Zaráracua, Uruapam, Michoacán, Mexico, October 10, 1904, by C. G. Pringle (No. 13424).

A relative, apparently, of *A. tricaudata* Duchartre, but in that the leaves are glabrous on the upper surface and rounded at the base, and the flowers are much larger, with a more deeply cleft calyx limb.

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***Podopterus cordifolius* Rose & Standl., sp. nov.**

Small tree with straggling pendent branches, the branchlets obscurely puberulent or glabrous; petioles slender, about 4 mm. long, minutely pilose; leaf blades oval-ovate, about 2.5 cm. long and 1.4 cm. wide, cordate or subcordate at the base, obtuse or acutish at the apex, bright green, slightly paler beneath, glabrous; racemes lateral, 2.5-3 cm. long, the flowers slender-pedicellate, glabrous; calyx about 1 cm. long, the wings of the segments 2-2.5 mm. wide, very thin, entire or somewhat undulate, long-decurrent upon the pedicel.

Type in the U. S. National Herbarium, No. 238935, collected along the seashore at Manzanillo, Colima, Mexico, June 25, 1892, by M. E. Jones (No. 103).

Only two other species of the genus are known. The present one is most nearly related to *P. mexicanus* Humb. & Bonpl., but in that the leaves are broadly obovate and acute or acuminate at the base. *P. emarginatus* Gross, described from Yucatán, is a very different plant with large orbicular leaves, and may not be correctly referred to *Podopterus*.

***Ruprechtia occidentalis* Standl., sp. nov.**

Shrub, about 3 meters high, with slender grayish branches, the branchlets strigillose at first; ocreae 2 mm. long; petioles 2-5 mm. long; leaf blades narrowly elliptic-oblong, lanceolate, or oblanceolate, 3-8 cm. long, 1-2.5 cm. wide, obtuse to attenuate at the base, acutish to acuminate at the apex, chartaceous or subcoriaceous, green and glabrous on the upper surface, the costa prominent but the other venation inconspicuous, slightly paler beneath, sparsely short-pilose or glabrate, the venation very prominent and closely reticulate; staminate spikes slender, paniculate, the flowers glabrous; pistillate racemes lateral, solitary or fasciculate, the rachis 1-2.5 cm. long, the pedicels slender, 2-3 mm. long, short-pilose, articulate near the apex; calyx in fruit 1.5-2.2 cm. long, short-pilose below, glabrous above; inner calyx lobes linear, 4 mm. long, appressed-pilose outside; achene ovoid, 8 mm. long, acuminate, thinly appressed-pilose, deeply sulcate, the apex acutely triquetrous.

Type in the U. S. National Herbarium, No. 636452, collected on a dry hillside at San Blas, Sinaloa, Mexico, March 29, 1910, by J. N. Rose, P. C. Standley, and P. G. Russell (No. 13630). The following additional specimens belong here:

SINALOA: Culiacán, 1891, *Palmer* 1782, 1780. Ymala, 1891, *Palmer* 1710.

Closely related to *C. fusca* Fernald, and perhaps only a variant of that species. *C. fusca*, however, has broader, densely short-pilose leaves, pubescent staminate flowers, and usually a larger fruiting calyx.

***Coccoloba acapulcensis* Standl., sp. nov.**

Glabrous throughout, the branches dark reddish brown; ocreae 8-12 mm. long; leaves mostly peltate, the petioles slender, 2.5-3 cm. long, attached to the blade 8-14 mm. from the base, the blades orbicular or nearly so, 5.5-8 cm. wide, rounded at both ends or sometimes emarginate at the base, subcoriaceous, slightly paler beneath, the venation prominu-

lous on the upper surface and prominent on the lower; fruit obovoid, about 2.5 cm. long and 1.5 cm. in diameter.

Type in the U. S. National Herbarium, No. 567933, collected in the vicinity of Acapulco, Guerrero, Mexico, October, 1894–March, 1895, by Edward Palmer (No. 399).

A very well-marked species, distinguished from all other North American ones by its peltate leaves. At least two South American species have peltate leaves, but they differ from the Mexican plant in other particulars. One leaf of the type specimens of the new species is not peltate but is deeply cordate at the base. The Mexican plant is a member of the subgenus *Euocoloba*.

Coccoloba chiapensis Standl., sp. nov.

Large tree; branchlets grayish, ferrugino-hirtellous when young; ocreae 5–7 mm. long, rufous-strigose; leaves subsessile, the petioles 4 mm. long or shorter, the blades elliptic, 12.5–20 cm. long, 4.3–8.5 cm. wide, cuneately narrowed to the obtuse asymmetric base, acuminate or long-acuminate at the apex, bright green, glabrous, the venation prominent or prominulous on both surfaces; inflorescence about 25 cm. long, nearly sessile, the rachis minutely puberulent, the nodes mostly 2-flowered; pedicels fully twice as long as the ocreolae; perianth tube 1.2 mm. long, the lobes nearly 2 mm. long.

Type in the U. S. National Herbarium, No. 884557, collected at Finca Irlanda, Chiapas, Mexico, June, 1914, by C. A. Purpus (No. 7699). There is another specimen of the same species in the National Herbarium (No. 884556), collected in Chiapas, without locality or date, by Purpus, and numbered 7599. It matches the type exactly, and may be of the same collection.

The leaves are very different from those of any of the described Mexican species.

Fendlerella lasiopetala Standl., sp. nov.

Low erect shrub, the stout branches covered with exfoliating bark; leaf blades elliptic, oval-elliptic, or ovate-elliptic, 10–18 mm. long, 5–8 mm. wide, acute or obtuse, densely strigose on the upper surface, beneath densely white-tomentose and copiously pilose, the margins plane or revolute; cymes about 1 cm. broad, dense; hypanthium and calyx densely strigose, the sepals lance-oblong; petals undulate, copiously sericeous-pilose outside; filaments subulate.

Type in the U. S. National Herbarium, No. 570036, collected in San Lorenzo Canyon, southeast of Saltillo, Coahuila, Mexico, April 16, 1905, by Edward Palmer (No. 535).

The other species of the genus differ in having glabrous petals. Only one species, *F. mexicana* Brandeg., has been reported previously from Mexico. That plant, which is known only from Puebla, resembles *F. lasiopetala* in the white tomentum of the leaves, but it has very sparse pubescence upon the calyx. *Fendlerella utahensis* (S. Wats.) Heller, the type of the genus, has been collected in the mountains of Chihuahua and Coahuila.